REMARKS

Claims 39-61 are currently pending. By this Response, claim 39 has been amended. No claims have been canceled. Applicant respectfully submits that no new matter has been added by this amendment and that the amendment is fully supported by the specification. Additionally, a Power of Attorney By Assignee of Entire Interest (Revocation of Prior Powers) and a Statement Under 37 C.F.R. § 3.73(b) are being submitted herewith. Therefore, claims 39-61 are at issue in this Application.

Claim Rejections Under §102

Claims 52-54, 56, 57, 59, and 60 were rejected under §102(b) as being anticipated by Dummermuth (U.S. Patent No. 6,073,053). Applicant respectfully traverses this rejection.

Claim 52 is directed to a control system having an output module operably coupled to the input module. Among other limitations, claim 52 requires the output module to include a reflex function structured to produce a state signal in response to receiving the representative signal from the input module, the output module being structured to execute the reflex function without requiring input from a controller.

The Examiner contends that Dummermuth discloses executing a reflex function without requiring input from a controller. Specifically, the Examiner cites to column 2, lines 19-24 of Dummermuth as providing this disclosure. (November 5, 2004 Office Action, page 2). Applicant respectfully disagrees. Dummermuth discloses providing responses to control situations by avoiding communications of control <u>to</u> the central processor. (Emphasis added, Dummermuth, col. 2, lines 19-24). Dummermuth does not disclose executing a reflex function without requiring input <u>from</u> a controller. Conversely, Dummermuth specifically requires an input from a controller. During operation, a logic circuit within the I/O module receives an enable signal from the central processor and a second electrical input to produce the electrical output upon assertion of the enable signal. (Dummermuth, col. 2, lines 11-15).

The Examiner further contends that the "central processor 12 and I/O rack 16 of Dummermuth, Fig. 1, together comprise the recited output module" and therefore "an input from a <u>separate</u> controller is not required." (emphasis added) (November 5, 2004 Office Action, page 10). Applicant respectfully disagrees. Applicant's claim 52 includes an output module structured to execute the reflex function without requiring input from a controller. There is no limitation in the claim that the controller be separate from the module. Unlike the limitation of claim 52, Examiner's combination of the central processor 12 and I/O rack 16 as the output module still requires an input from a controller—the central processor 12.

In order for a reference to act as a § 102 bar to patentability, the reference must teach each and every element of the claimed invention. Kalman v. Kimberly-Clark Corp.,713 F.2d 760, 771 (Fed. Cir. 1983). Applicant respectfully submits that Dummermuth does not disclose each and every element of independent Claim 52. Therefore, Dummermuth cannot anticipate Claim 52.

Accordingly, because Dummermuth fails to teach executing a reflex function without requiring input from a controller, Applicant respectfully submits that all of the elements of claim 52 are not in the cited reference and that claim 52 is patentable over Dummermuth. Moreover, claims 53, 54, 56, 57, 59, and 60 depend on claim 52 and include each of its limitations. Therefore, Applicant respectfully submits that claims 53, 54, 56, 57, 59, and 60 are also patentable over Dummermuth.

Claim Rejections Under §103

Additionally, the Examiner has rejected claims 39-42, 44, 46, 49, 50, and 55 as being unpatentable over Dummermuth in view of McLaughlin. Applicant respectfully traverses this rejection.

Claim 39, as amended, is directed towards a control system having and input and an output module. Among other limitations, claim 39 requires a first reflex function being structured to produce a state signal in response to receiving the representative signal from the input module and without requiring input from a controller.

As noted above with respect to claim 52, Dummermuth requires input from a controller such that during operation, a logic circuit within the I/O module receives an enable signal from the central processor and a second electrical input to produce the electrical output upon assertion of the enable signal. (Col. 2, lines 11-15). Dummermuth does not disclose a first reflex function being structured to produce a state signal in response to receiving the representative signal from the input module and without requiring input from a controller. Moreover, McLaughin fails to disclose, teach, or suggest a first reflex function being structured to produce a state signal in response to receiving the representative signal from the input module and without requiring input from a controller.

Accordingly, Applicant respectfully submits that all of the elements of claim 39 are not in the cited references and that claim 39 is patentable over Dummermuth in view of McLaughin. Moreover, claims 40-42, 44, 46, 47, and 50 depend on claim 39 and include each of its limitations. Therefore, Applicant respectfully submits that claims 40-42, 44, 46, 47, and 50 are also patentable over Dummermuth in view of McLaughin.

In addition to the failure to disclose the claimed invention, the combination of Dummermuth with McLaughin is improper because there is no motivation or incentive in the prior art to combine these references in the manner suggested by the Examiner. See *In re Napier*, 55 F.3d 610, 613, 34 U.S.P.Q.2d 1782, 1785 (Fed. Cir. 1995).

Obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988); *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). Here, there is absolutely no incentive in the cited references to combine the references in the manner suggested by the Examiner. When the motivation to combine the teachings of the references is not immediately apparent, it is the duty of the Examiner to explain why the combination of the teachings is proper. *Ex parte Skinner*, 2 USPQ2d 1788 (Bd. Pat. App. & Inter. 1986).

To establish a prima facie case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. See MPEP 2143.01 Second, there must be a reasonable expectation of success. See MPEP 2143.02. Finally, the prior art reference(s) must teach or suggest all of the claim limitations. See MPEP 2143.03. The teaching or suggestion to make the claimed combinations and the reasonable expectation of success must both be found in the prior art, not in the applicant's disclosure. *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991). The Examiner bears the initial burden on factually supporting any *prima facie* conclusion of obviousness. See MPEP § 2142. In the present case, the Examiner failed to meet this burden.

As set forth in the Office Action, the Examiner simply asserts "[i]t would have been obvious to one of ordinary skill in the art at the time of the invention to modify McLaughin by using firmware in order to provide an easily programmable circuit." (Office Action of November 5, 2004, p. 4). Contrary to the burden imposed on the Examiner, this is simply a conclusory statement that fails to establish where the prior art provides any motivation or incentive to make the proposed combination. Moreover, the Examiner has failed to establish any reasonable "expectation of success" in making the proposed modification.

It is apparent the Examiner has taken isolated features from the cited references, and has used the claims of the present application as a template. Such hindsight reconstruction is improper. It is well-recognized that the claimed invention cannot be used as an instruction manual or template to piece together the teachings of the prior art in an attempt to render the claimed device obvious. *In re Fritch*, 972 F.2d 1260, 1266 (Fed. Cir. 1992); *Fine*, 837 F.2d at 1075 ("one cannot use hindsight reconstruction to pick and choose among isolated disclosures in the prior art to deprecate the claimed invention.")

Applicant respectfully submits that claim 55 is also patentable over Dummermuth in view of McLaughin. Claim 55 depends on claim 52 and includes all of its limitations. As such, Applicant respectfully submits that claim 55 is patentable over Dummermuth in view of McLaughin in view of the remarks presented above.

Appl. No. \09/903,899

Attorney Docket No. SAA-0055 (402 P 233)

Reply to Office Action of November 5, 2004

The Examiner has rejected claims 43, 45, 48, and 51 as being unpatentable over Dummermuth and McLaughin in view of Edwards et al. (U.S. Patent No. 5,938,754). Claims 43, 45, 48, and 51 depend on claim 39 and include all of its limitations. Therefore, Applicant respectfully submits that claims 43, 45, 48, and 51 are patentable over Dummermuth and McLaughin in view of Edwards.

Additionally, the Examiner has again failed to meet his burden of establishing an incentive or motivation in the prior art for making combining the references.

The Examiner has rejected claims 58 and 61 as being unpatentable over Dummermuth in view of Edwards. Claims 58 and 61 depend on claim 52 and include all of its limitations. Therefore, Applicant respectfully submits that claims 58 and 61 are patentable over Dummermuth in view of Edwards.

Additionally, the Examiner has again failed to meet his burden of establishing an incentive or motivation in the prior art for making combining the references.

In light of the foregoing Amendment and Remarks, Applicant respectfully submits that pending claims 39-61 are in condition for allowance. The Examiner is invited to contact the undersigned if there are any questions concerning this Response.

Respectfully submitted,

Dated: $\frac{2}{3/05}$

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CERTIFICATE OF MAILING (37 C.F.R. § 1.8a)

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